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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/504,150	02/15/2000	Michael George Bunn	190-1445	7518
75	590 02/19/2004	EXAMINER		
	ith McWilliams Sween	KIM, JUNG W		
	P O Box 2786 Chicago, IL 60690-2786		ART UNIT PAPER NUMBER	
3 /			2132	$\overline{\mathbb{Q}}$
			DATE MAILED: 02/19/2004	\mathcal{L}

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	-4/			
, Office Action Summary		09/504,150	BUNN, MICHAEL GEOR	<i>V</i> ∶GE			
		Examiner	Art Unit				
		Jung W Kim	2132				
Period for	 The MAILING DATE of this communication ap r Reply 	pears on the cover sheet with the	correspondence address -	-			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
2a)⊠ 3)□	Responsive to communication(s) filed on <u>17 I</u> This action is FINAL . 2b) Thi Since this application is in condition for allowa closed in accordance with the practice under	s action is non-final. ance except for formal matters, p		s is			
Disposition	on of Claims						
5)□ 6)⊠ 7)□	 4) Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-15 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 						
Application	on Papers						
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 							
Priority u	nder 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 No(s)/Mail Date	4) Interview Summa Paper No(s)/Mail 3) 5) Notice of Informa 6) Other:					

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DETAILED ACTION

Response to Amendment

- 1. Examiner withdraws the objection to the disclosure as the amendment to the disclosure overcomes the objection.
- 2. Examiner withdraws the objection to the title as the amended title overcomes the objection.
- 3. Examiner withdraws the objection to claim 8 as the amended claim overcomes the objection.
- 4. Examiner withdraws the rejections to claims 8 and 12 under 35 U.S.C. 112 second paragraph as the amendments to the claims overcome the objections.

Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 6. Claims 1 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not disclose the step of checking whether the document producer is authorized to produce the document.

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Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 8. Claims 1-11 and 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kocher U.S. Patent No. 6,188,766 (hereinafter Kocher). The invention as disclosed in the claims reads on a plurality of well-known authentication protocols, which define steps to provide document certification and verification by a trusted party. These protocols are found in several inventions including the one disclosed by Kocher. As per claim 1, Kocher discloses a method for authenticating a printed document comprising the following steps:
 - a. a document producer sends information to be included in a document to an authentication authority (see Kocher, Figures 1, 2; col. 3, lines 29-38);
 - b. the authentication authority checks whether the document producer is authorized to produce the document and, if so, cryptographically generates an authentication code from the information, and sends the authentication code back to the document producer (see Kocher, Figure 2; col. 3, lines 39-55; col. 7,

line 10-col. 10, line 8, 'Document Submission And Timestamping'; especially col. 7, lines 42-46, 50-56 and col. 8, lines 43-47, 52-53);

- c. upon receipt of the authentication code from the authentication authority, the document producer prints the document, including both the information and the authentication code (see Kocher, Figure 4; col. 8, lines 33-62);
- d. upon presentation of the document for authentication, a document checker cryptographically checks the authentication code against the information in the document to determine whether the printed document is authentic (see Kocher, Figure 3; col. 3, line 55-col. 4, line 9; col. 10, line 9-col. 12, line 12, 'Timestamp Verification').

The aforementioned covers claim 1.

As per claim 2, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, the document producer includes a bar code in the document, the bar code containing the authentication code, and wherein the document checker is provided with means for reading the bar code to obtain the authentication code (see Kocher, Figure 4; col. 3, lines 48-55; col. 8, lines 42-47, 52-53).

11. As per claim 3, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, the document includes a pre-printed serial number, which is sent to the authentication

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authority, and wherein the authentication authority uses the pre-printed serial number in generating the authentication code (see Kocher, col. 7, lines 22-42, especially lines 31-33; col. 8, line 58).

- 12. As per claim 4, Kocher discloses a method for authenticating a printed document as outlined above in the claim 3 rejection under 35 U.S.C. 102(e). In addition, the preprinted serial number is included in the document as a pre-printed bar code (see Kocher, col. 3, lines 48-55; col. 7, lines 31-33; col. 8, lines 42-47, 58).
- 13. As per claim 5, Kocher discloses a method for authenticating a printed document as outlined above in the claim 4 rejection under 35 U.S.C. 102(e). In addition, the document producer uses a combined printer and bar-code scanner to read the preprinted bar code and then to print the document (see Kocher, Figure 4; col. 9, lines 10-49).
- 14. As per claim 6, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, the document checker performs the following steps: entering the authentication code and information in the document into a computer; causing the computer to cryptographically generate a check code from the information; causing the computer to compare the check code with the authentication code and to generate a warning indication if the

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check code does not correspond with the authentication code (see Kocher, Figure 3; col. 10, lines 36-46).

- 15. As per claim 7, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, the authentication authority cryptographically generates the authentication code using a cryptographic key associated with the authentication authority (see Kocher, col. 7, lines 46-56).
- 16. As per claim 8, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, the cryptographic key is a secret key known to both the authentication authority and the document checker, but not known to the document producer (see Kocher, col. 7, lines 50-59).
- 17. As per claim 9, Kocher discloses a method for authenticating a printed document as outlined above in the claim 8 rejection under 35 U.S.C. 102(e). In addition, the authentication code is generated by performing a key-dependent one-way hash of the information using the secret key (see Kocher, col. 7, lines 46-56).
- 18. As per claim 10, Kocher discloses a method for authenticating a printed document as outlined above in the claim 7 rejection under 35 U.S.C. 102(e). In

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addition, the authentication authority generates the authentication code using the private key of a public/private key pair, and wherein the document checker checks the authentication code using the public key of the public/private key pair (see Kocher, col. 10, lines 36-45).

- 19. As per claim 11, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). In addition, the communication between the document producer and the authentication authority is protected by encryption (see Kocher, col. 13, lines 35-39).
- 20. As per claims 13-15, they are apparatus claims corresponding to claims 1-11 and they do not teach or define above the information claimed in claims 1-11. Therefore, claims 13-15 are rejected as being anticipated by Kocher for the same reasons set forth in the rejections of claims 1-11.

Claim Rejections - 35 USC § 103

21. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kocher in view of VeriSign Certification Practice Statement version 1.2 (hereinafter VeriSign). As per claim 12, Kocher discloses a method for authenticating a printed document as outlined above in the claim 1 rejection under 35 U.S.C. 102(e). Kocher is silent on the matter of offering the document producer an option of having the document printed by the authentication authority instead of printing the document. However, having the

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option of publishing a document in non-local repositories is often implemented in the art. For example, VeriSign teaches that publication of certificates generated for subscribers are published by the issuing authority in the central repository and in one or more other repositories under the discretion of the issuing authority. Furthermore, VeriSign discloses that the subscribers of the certificate may publish their certificates in other repositories (see VeriSign, section 7.5, 'Publication'). It would be obvious to one of ordinary skill in the art at the time the invention was made to specify an option of having the document printed by the authentication authority instead of printing the document locally. Motivation for such a combination would enable a document to be printed by a trusted source and disallow untrusted sources to print the document.

Response to Arguments

- 9. Applicant's arguments filed on December 17 2003 have been fully considered but they are not persuasive.
- 10. Applicant argues that the timestamp returned by the TTS cannot be construed as an authentication code (page 11, 2nd and 3rd sentence). However, Kocher clearly discloses an embodiment wherein "cryptographic hashes of documents and/or timestamps" are included in the receipt returned to the document producer for future verification of the cryptographic timestamp (see Kocher, col. 8, lines 42-47, 52-53). In this embodiment, the TTI (telecopier transmission identifier) is the representative identifier for the document as disclosed by Kocher (see col. 3, line 49-52). Furthermore,

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cryptographic timestamps are standard means in the art to create an authenticated snapshot of a document; Kocher summarizes an example of a cryptographic timestamp used in document authentication by the authentication authority by "combining the hash of the digital data with the date and time, hashing the combination, and digitally signing the result using a private RSA key (see Kocher, col. 7, lines 54-56)". Hence, the receipt returned authenticates the document received.

- 11. Applicant argues that the TTS does not check whether the document producer is authorized to produce the document. However, based on the enabling disclosure in the applicant's specification of an authorization step to check if the "tester" is authorized to use the system (page 5, 2nd paragraph), the TTS disclosed by Kocher does check if the document producer is authorized to produce the document (see Kocher, col. 7, lines 10-46).
- 12. Applicant argues "there is absolutely no suggestion in Kocher that a document checker can determine whether the printed document is authentic by cryptographically checking an authentication code against information in the document" (page 11, 4th paragraph, first sentence). Examiner disagrees based on the disclosure of Kocher (see Kocher, col. 3, lines 48-52, 53-55; col. 8, lines 44-47, 52-53 and col.10, lines 36-46).
- 13. In regards to the applicant's argument of claims 3-5, examiner points to the following passages in Kocher: col. 7, lines 31-33 and col. 8, line 58.

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14. In regards to the applicant's argument of claims 6-10, examiner points to the following passages in Kocher: col. 10, lines 36-46.

15. In regards to the applicant's argument of claim 8, examiner argues that the TTS is both the authentication authority and the document checker, and hence both parties know of the secret key.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W Kim whose telephone number is (703) 305-8289. The examiner can normally be reached on M-F 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jung W Kim Examiner Art Unit 2132

Jk February 9, 2004

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